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Does *Polyommatus (Plebicula) nivescens* Keferstein, 1851, occur in France? (Lepidoptera: Lycaenidae)

W. J. Tennent & M. L. Munguira

Abstract

The occurrence of *Polyommatus (Plebicula) nivescens* Keferstein, 1851, outside Spain is questioned. Published records of the species from the French Pyrénées (District of Ariège), dating back to 1970, are examined. The conclusion is reached that there is little or no evidence to support the presence of *P. nivescens* in France, and that reports of its occurrence there require confirmation.

KEY WORDS: Lepidoptera, Lycaenidae, *Polyommatus (Plebicula) nivescens*, endemism, Spain, France.

¿*Polyommatus (Plebicula) nivescens* Keferstein, 1851, se encuentra en Francia?
(Lepidoptera: Lycaenidae)

Resumen

Se cuestiona la presencia de *Polyommatus (Plebicula) nivescens* Keferstein, 1851 fuera de España. Registros publicados de la especie de los Pirineos franceses (Distrito de Ariège), que se remontan a 1970, son examinados. La conclusión es que, llegado a este punto, hay poca o ninguna evidencia que respalde la presencia de *P. nivescens* en Francia y que los trabajos sobre su presencia, requieren confirmación.

PALABRAS CLAVE: Lepidoptera, Lycaenidae, *Polyommatus (Plebicula) nivescens*, endemismo, España, Francia.

Introduction

In citing the distribution of *Polyommatus (Plebicula) nivescens* Keferstein, 1851, almost all authors have regarded this species as endemic to Spain. A recent exception is Tristan Lafranchis, who reported *P. nivescens* from the Department of Ariège, which borders Spain in the French Pyrenees (LAFRANCHIS, 2000: 228; LAFRANCHIS, 2004: 161; LAFRANCHIS, 2007: 169). This came to the authors' attention whilst collating data for a current round of IUCN Red List assessments, and investigation established that the species was in effect reported from France almost 40 years ago, but that through what might be described as "geographical ignorance" it remained largely unregistered.

Although KEFERSTEIN (1851: 309) described "*Lycaena dorylas* var. *nivescens*" from the Pyrenees, this was almost certainly in error (MUNGUIRA, 1989), and subsequent authors (e.g. HIGGINS & RILEY, 1970), cite the Sierra de Alfacar (Granada Province) as the Type Locality. It occurs as a rather local butterfly throughout much of the eastern half of Spain (in 125 x 100 km² UTM squares) in the regions of Catalonia, Valencia, Murcia, Andalusia, Aragón, Castilla-La Mancha, Castilla-León and Madrid (GARCÍA-BARROS *et al.*, 2004). Subpopulations are very local; it has been regarded as a "sensitive" species (e.g. VIEJO MONTESINOS *et al.*, 1993: 365), but was not regarded as threatened by MUNGUIRA & MARTÍN (1993), or included in the latest Spanish Invertebrates Red List (VERDÚ & GALANTE, 2006). It was noted as an endemic butterfly in the first edition of the Iberian Lepidoptera

Red Data Book (VIEDMA & GÓMEZ-BUSTILLO, 1976), but removed from the second edition (VIEDMA & GÓMEZ-BUSTILLO, 1985) when it proved to be more common than previously thought.

HIGGINS & RILEY (1970), in the first edition of their now well-known Field Guide to European butterflies, said of *Plebicula nivescens* “Confined to Spain ... extending to Pyrenees at Aulus”. In fact this is a contradiction, since there is no “Aulus” in Spain, and the place name can only apply to the small village of Aulus-le-Bains which lies at *ca* 750 m elevation in the French Department of Ariège, almost 10 km north of the Spanish border. It is interesting that although other European language editions were adaptations of HIGGINS & RILEY (1970-1983) (as opposed to strict translations), much the same information was presented. The French edition states “Limitée à l’Espagne ... avec une avancée jusqu’à Aulus dans les Pyrénées” and the Spanish edition declares “España, local aunque ampliamente distribuida desde Granada hasta Cataluña y León, extendiéndose hasta los Pirineos en Aulus. Ausente en el O. de España”. Subsequent editions of HIGGINS & RILEY (1970-1983) contain much the same information, but TOLMAN (1997: 128), the successor to HIGGINS & RILEY (1970-1983), cites “Spain” as the distribution of *P. nivescens*, and makes no mention of Aulus.

Distribution maps in all editions of HIGGINS & RILEY (1970-1983) are too small to provide anything beyond a rough guide, but do not obviously include any part of the French Pyrenees in the distribution. Maps provided by TOLMAN (1997) are equally small, but have the addition of country borders, from which it is clear that distribution of *P. nivescens* does not cross into France, although it does appear to reach the border in the southern Pyrenees. Conversely, the detailed map of *nivescens* distribution prepared by GARCÍA-BARROS *et al.* (1994: 179) does include the presence of *nivescens* in one 10 km² on the French side of the Pyrenees - but this is in the Department of Pyrénées Atlantiques, more than 150 km west of Aulus (see Fig. 1). The text of GARCÍA-BARROS *et al.* (1994: 70) says: “... In the Pyrenees it is only present in low or peripheral areas and records from higher areas are surely due to errors (MUNGUIRA, 1989)”. The reference here to the second author refers to an unpublished (other than in microfiche form) doctoral thesis (MUNGUIRA, 1989).

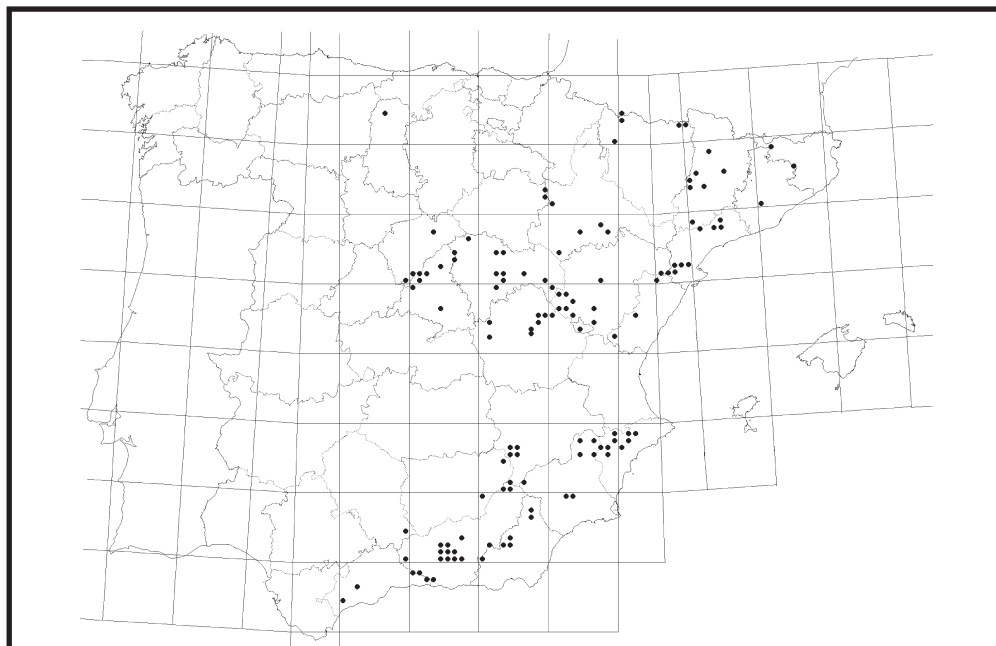


Fig 1.— Distribution of *Polyommatus (Plebicula) nivescens* Keferstein (from GARCÍA-BARROS *et al.*, 1994)

The source of the Aulus record is intriguing, and the fact that it is mentioned in English editions of Higgins & Riley over a period of several decades, as well as in French and Spanish editions, without anyone apparently registering the fact that Aulus is in effect a “new” country record for a local butterfly believed to be endemic to Spain, is remarkable. Since Norman Riley was the Keeper (Head) of Entomology at the Natural History Museum (BMNH), London between 1932 and 1955, and had a particular interest in butterflies, it might be supposed that the Aulus record originated from the collections of the BMNH. However, none of the *ca* 120 specimens of *P. nivescens* in the BMNH collections include Aulus on their labels, and most of the series originates from well-known localities in the Sierra Nevada and Sierra de Alfacar. Likewise, MANLEY & ALLCARD (1970), in the first modern comprehensive treatment of Iberian butterflies, published in the same year as the first edition of Higgins & Riley, made no mention of Aulus, or of any French locality. Manley’s butterfly collection is now in Kelvingrove Art Gallery and Museum, Glasgow, Scotland, and contains no specimen of *nivescens* from the Pyrenees, although it does contain specimens of the closely associated species *Polyommatus (Plebicula) dorylas* Denis & Schiffermüller, 1775, from at least two Pyrenean localities (Jeanne Robinson, pers comm. to WJT, June 2008).

LAFRANCHIS (2000: 228) was thought to have been the first to note the apparent occurrence of *P. nivescens* in France, based primarily on a recent, unpublished, record from French lepidopterist François Radigue, who collected “a few specimens” on the top of a mountain in Ariège (Lafranchis, pers. comm. to WJT, May 2008). However, François Radigue informed the first author in July 2008 that his report of *nivescens* from the Pyrenees was the result of a misidentification, and that the butterflies in question were in fact *Polyommatus eros* Ochseneheimer, 1808. Radigue also pointed out (pers comm. to WJT, July 2008) that this erroneous record of *P. nivescens* from France was included in other publications, including the French language edition of Tolman (TOLMAN, 1999), which states in the distribution section “...France, Ariège (Saint-Lary) (Radigue comm. pers.) (NDT [= note du traducteur]) ...” ([TOLMAN], 1999: 128). However, it is noted that France is not included in the text what is in effect a “revised” English edition of TOLMAN (1997) (TOLMAN, 2008: 148), but that the crude distribution provided on the accompanying map does in fact cross the border into France in the southern Pyrenees. Whether this is so by design or mistake is not clear: the text suggests the latter.

In view of the fact that the source of HIGGINS & RILEY (1970-1983) note of “Aulus” remains a mystery, and that recent records ([TOLMAN], 1999; LAFRANCHIS, 2000, etc.) were based on misidentification, evidence for the presence of *P. nivescens* in France is weak, and requires confirmation.

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Tristan Lafranchis (F: [Paris]) provided the source of his published record of *P. nivescens*; François Radigue (F: La Chapelle Souef) generously discussed details of his capture of *P. eros*; Jeanne Robinson, Kelvingrove Art Gallery and Museum, Glasgow, Scotland, provided data from the Manley collection in her care; Peter Russell (GB: East Wittering) supplied copies of some French literature; Gerry Tremewan (GB: Truro) provided some translation.

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